

§ 73.61

Washington, DC, Attention: Audio Division, Media Bureau, to request additional time as may be required to complete repairs of the defective instrument.

[41 FR 36817, Sept. 1, 1976, as amended at 48 FR 38477, Aug. 24, 1983; 49 FR 49850, Dec. 24, 1984; 50 FR 32416, Aug. 12, 1985; 51 FR 2707, Jan. 21, 1986; 53 FR 2498, Jan. 28, 1988; 63 FR 33876, June 22, 1998; 66 FR 20755, Apr. 25, 2001; 67 FR 13231, Mar. 21, 2002]

§ 73.61 AM directional antenna field strength measurements.

(a) Each AM station using a directional antenna must make field strength measurements at the monitoring point locations specified in the instrument of authorization, as often as necessary to ensure that the field at those points does not exceed the values specified in the station authorization. Additionally, stations not having an approved sampling system must make the measurements once each calendar quarter at intervals not exceeding 120 days. The provision of this paragraph supersedes any schedule specified on a station license issued prior to January 1, 1986. The results of the measurements are to be entered into the station log pursuant to the provisions of § 73.1820.

(b) Partial proof of performance measurements using the procedures described in § 73.154 must be made whenever the licensee has reason to believe that the radiated field may be exceeding the limits for which the station was most recently authorized to operate.

(c) A station may be directed to make a partial proof of performance by the FCC whenever there is an indication that the antenna is not operating as authorized.

[50 FR 47054, Nov. 14, 1985]

§ 73.62 Directional antenna system tolerances.

(a) Each AM station operating a directional antenna must maintain the indicated relative amplitudes of the antenna monitor currents within 5% of the values specified therein. Directional antenna relative phase currents must be maintained to within ± 3 deg. of the values specified on the instrument of authorization.

47 CFR Ch. I (10–1–05 Edition)

(b) Whenever the operating parameters of a directional antenna cannot be maintained within the tolerances specified in paragraph (a) of this section, the following procedures will apply:

(1) The licensee shall measure and log every monitoring point at least once for each mode of directional operation. Subsequent variations in operating parameters will require the remeasuring and logging of every monitoring point to assure that the authorized monitoring point limits are not being exceeded.

(2) Provided each monitoring point is within its specified limit, operation may continue for a period up to 30 days before a request for Special Temporary Authority (STA) must be filed, pursuant to paragraph (b)(4) of this section, to operate with parameters at variance from the provisions of paragraph (a) of this section.

(3) If any monitoring point exceeds its specified limit, the licensee must either terminate operation within 3 hours or reduce power in accordance with the applicable provisions of § 73.1350(d), in order to eliminate any possibility of interference or excessive radiation in any direction.

(4) If operation pursuant to paragraph (b)(3) of this section is necessary, or before the 30 day period specified in paragraph (b)(2) of this section expires, the licensee must request a Special Temporary Authority (STA) in accordance with § 73.1635 to continue operation with parameters at variance and/or with reduced power along with a statement certifying that all monitoring points will be continuously maintained within their specified limits.

(5) The licensee will be permitted 24 hours to accomplish the actions specified in paragraph (b)(1) of this section; *provided that*, the date and time of the failure to maintain proper operating parameters has been recorded in the station log.

(c) In any other situation in which it might reasonably be anticipated that the operating parameters might vary out of tolerance (such as planned array repairs or adjustment and proofing procedures), the licensee shall, *before such activity is undertaken*, obtain an STA in

Federal Communications Commission

§ 73.68

accordance with § 73.1635 in order to operate with parameters at variance and/or with reduced power as required to maintain all monitoring points within their specified limits.

[50 FR 30946, July 31, 1985, as amended at 60 FR 55480, Nov. 1, 1995; 66 FR 20755, Apr. 25, 2001]

§ 73.68 Sampling systems for antenna monitors.

(a) Each AM station permittee authorized to construct a new directional antenna system, must install the sampling system in accordance with the following specifications:

(1) Devices used to extract or sample the current and the transmission line connecting the sampling elements to the antenna monitor must provide accurate and stable signals to the monitor (e.g., rigidly mounted and non-rotatable loops and all system components protected from physical and environmental disturbances).

(2) Sampling lines for directional antennas may be of different lengths provided the phase difference of signals at the monitor are less than 0.5 degrees between the shortest and longest cable lengths due to temperature variations to which the system is exposed.

(3) Other configurations of sampling systems may be used upon demonstration of stable operation to the FCC.

(b) A station having an antenna sampling system constructed according to the specifications given in paragraph (a) of this section may obtain approval of that system by submitting an informal letter request to the FCC in Washington, DC, Attention: Audio Division, Media Bureau. The request for approval, signed by the licensee or authorized representative, must contain sufficient information to show that the sampling system is in compliance with all requirements of paragraph (a) of this section.

NOTE TO PARAGRAPH (b): A public notice dated December 9, 1985 giving additional information on approval of antenna sampling systems is available through the Internet at <http://www.fcc.gov/mb/audio/decdoc/letter/1985-12-09-sample.html>.

(c) In the event that the antenna monitor sampling system is temporarily out of service for repair or replacement, the station may be oper-

ated, pending completion of repairs or replacement, for a period not exceeding 120 days without further authority from the FCC if all other operating parameters and the field monitoring point values are within the limits specified on the station authorization.

(d) If the antenna sampling system is modified or components of the sampling system are replaced, the following procedure shall be followed:

(1) Special Temporary Authority (see § 73.1635) shall be requested and obtained from the Commission's Audio Division, Media Bureau in Washington to operate with parameters at variance with licensed values pending issuance of a modified license specifying parameters subsequent to modification or replacement of components.

(2) Immediately prior to modification or replacement of components of the sampling system, and after a verification that all monitoring point values and operating parameters are within the limits or tolerances specified in the rules, the following indications must be recorded for each radiation pattern: Final plate current and plate voltage, common point current, antenna monitor phase and current indications, and the field strength at each monitoring point. Subsequent to these modifications or changes the procedure must be repeated.

(3) If monitoring point field strengths or antenna monitor parameters exceed allowable limits following the replacement or modification of that portion of the sampling system above the base of the towers, a partial proof of performance shall be executed in accordance with § 73.154. The partial proof of performance shall be accompanied by common point impedance measurements made in accordance with § 73.54.

(4) Request for modification of license shall be submitted to the FCC in Washington, DC, within 30 days of the date of sampling system modification or replacement. Such request shall specify the transmitter plate voltage and plate current, common point current, base currents and their ratios, antenna monitor phase and current indications, and all other data obtained pursuant to this paragraph.